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ABSTRACT

This report compares the findings on graduates newly qualified to teach from the National Center for Education Statistics's 1981 Survey of 1979-80 College Graduates with those from their 1978 Survey of 1976-77 College Graduates. In the 1976-77 survey, 7,922 graduates responded from 283 institutions; in 1979-80, 9,312 graduates responded from 286 institutions. Three major findings stood out in the comparison. First, between 1976-77 and 1979-80, the number of newly qualified to teach (bachelor's recipients) dropped by about 39,000 or 23 percent. Second, the proportions of bachelor's recipients obtaining teaching jobs in both years were not significantly different, 77 percent for 1979-80, and 75 percent for 1976-77. Third, bachelor's recipients newly qualified to teach in 1976-77 and 1979-80 fared better on labor market measures than did any other bachelor's recipients as a group, whether they taught or not. Nine tables display report data. (JMK)

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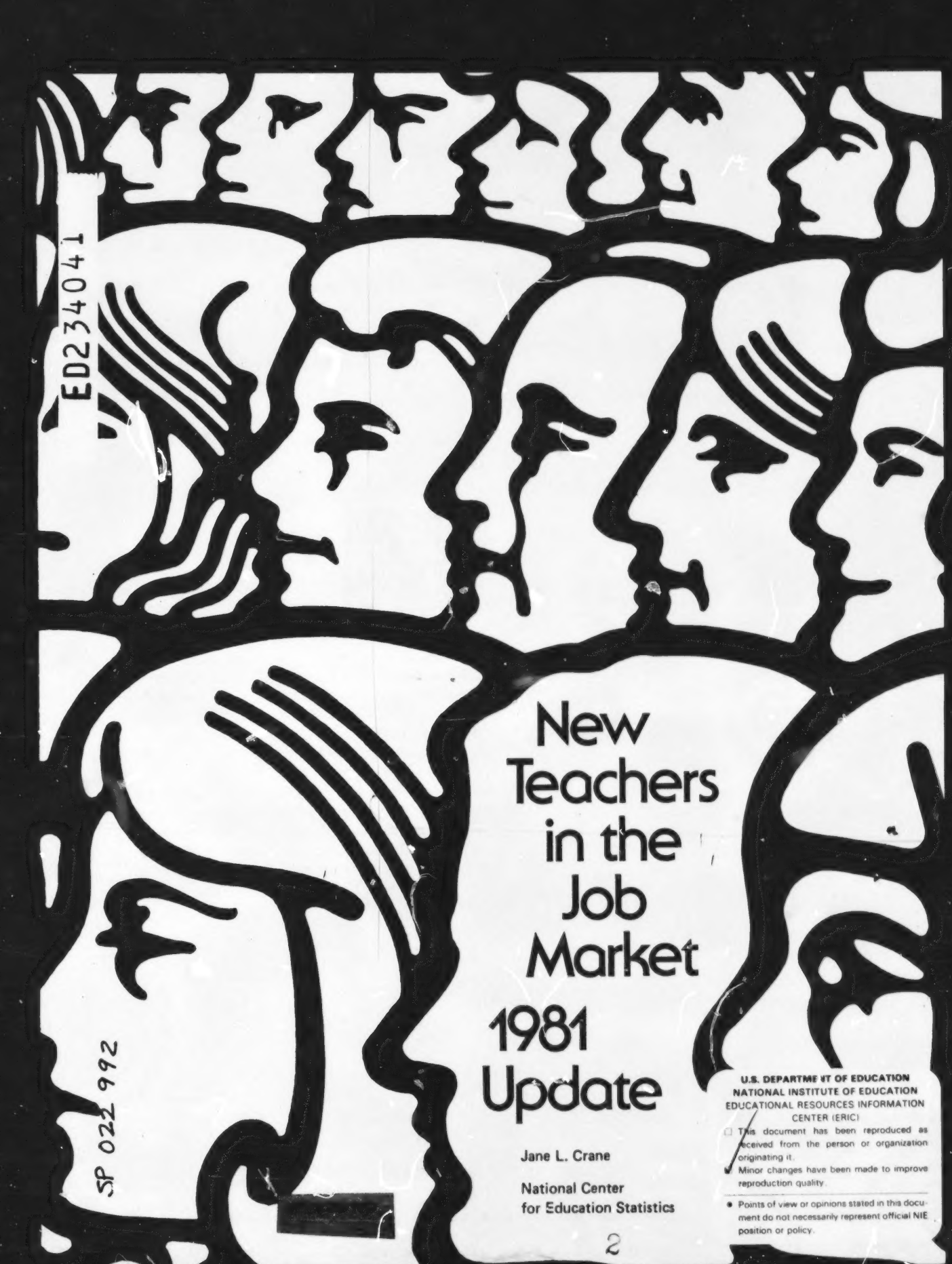

New Teachers in the Job Market

1981 Update

Jane L. Crane

National Center
for Education Statistics

SP 022 992

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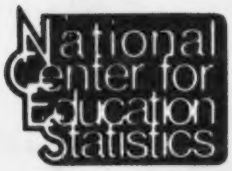

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Foreword

The supply of persons newly qualified to teach and the demand for their teaching services has changed dramatically over the past two decades. This survey, conducted pursuant to a mandate of Congress, monitors the supply of newly qualified teachers so that any pending severe imbalance can be recognized and action taken to correct it.

This report, "New Teachers in the Job Market: 1981 Update," looks at the labor force status of all new graduates as well as changes in the supply of persons newly qualified to teach and in the percentage of them obtaining teaching jobs. This information is of particular interest both to college students and education policymakers. The report specifically considers the following questions:

> How many persons newly qualified to teach are colleges graduating? What percentage of these new teachers apply for and obtain teaching jobs? How do graduates newly qualified to teach fare in the labor market compared to other graduates? What kinds of jobs do graduates newly qualified to teach get if they aren't teaching?

These questions are examined for bachelor's recipients who graduated between July 1, 1979, and June 30, 1980, and were asked about their work experience as of May 1981. The survey commenced in September 1981. Comparisons are made with bachelor's recipients who graduated between July 1, 1976, and June 30, 1977, and were asked about their work experience as of February 1978. This survey was mailed in April 1978.

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May 1983

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Overview

This report compares the findings on graduates newly qualified to teach from the 1981 Survey of 1979-80 College Graduates with those from the 1978 Survey of 1976-77 College Graduates. The designation "newly qualified to teach" is assigned to those persons who meet both of the following criteria:

1. They first became eligible for a teaching license during the period July 1, 1979, to June 30, 1980[1]; or they were not certified or eligible for a teaching license, but were teaching at the time of the survey.
2. They never held full-time, regular teaching positions (as opposed to substitute) prior to completing the requirements for the degree which brought them into the survey.

In comparing the 2 survey years, three major findings stand out:

First, between 1976-77 and 1979-80, the number of newly qualified to teach bachelor's recipients dropped by about 39,000 or 23 percent. While 23 percent is the best single estimate of the decline, this estimate is subject to errors due to sampling and measurement. When sampling errors are considered, we can state with 95 percent certainty that the decline is within the range of 15 to 31 percent. The estimated decrease in bachelor's recipients newly qualified to teach occurred despite the nominal increase in the total number of graduates with bachelor's degrees from 897,800[2] in 1976-77 to 905,700[2] in the current survey.

Second, for bachelor's newly qualified to teach who applied to teach, the proportions obtaining teaching jobs in both years were not significantly different, 77 percent for 1979-80 and 75 percent for 1976-77.

Third, bachelor's recipients newly qualified to teach in 1976-77 and 1979-80 fared better on labor market measures than all other bachelor's recipients as a group whether they taught or not. A higher percentage of the graduates newly qualified to teach participated in the labor force, were employed full time, and were in fields closely related to their majors. A lower percentage held nonprofessional, nonmanagerial and nontechnical jobs.

A two-stage sample was used to collect the data in both surveys. The first stage sample consisted of colleges and universities offering a bachelor's or master's degree; the second stage sample consisted of graduates from the previously selected institutions. The information was collected by using a mail questionnaire (see appendix for details).

All numbers reported here are estimates subject to sampling error. This means, for instance, that while the estimate for the number of newly qualified to teach in 1981 who applied to teach is 85 percent (table 1), the estimate that would have been obtained by surveying all graduates (in the same manner that the sample was surveyed) would quite likely be between 81 and 89 percent (95 percent confidence interval). Therefore, this report presents the reliability of the *major* estimates in parentheses following the estimate, e.g., 85 percent (81 to 89). For a complete explanation on how to apply sampling errors to the estimates reported in this publication, see appendix.

[1]The time frame for the 1978 survey was July 1, 1976, to June 30, 1977.

[2]Totals do not include bachelor's recipients from U.S. Service Schools and outlying areas, or graduates living at foreign addresses. Graduates identified as deceased at the time of the survey were treated as out-of-scope.

Graduates Newly Qualified to Teach Obtaining Jobs in Elementary/Secondary Teaching

Between July 1, 1979, and June 30, 1980, an estimated 139,000 (129,000 to 149,000) college graduates with bachelor's (132,200) and master's degrees (6,800) became qualified to teach for the first time (table 1). This estimate represented a 24 percent (16 to 32) decrease in the number of graduates newly qualified to teach over the previous survey. In 1981, graduates newly qualified to teach represented 12 percent of all graduates with bachelor's and master's degrees, or 15 percent of bachelor's and 2 percent of master's recipients. In 1978, this group represented 15 percent of graduates, 19 percent of bachelor's and 4 percent of master's recipients.

Although the total number of bachelor's recipients newly qualified to teach decreased, a somewhat larger proportion of them applied for teaching jobs in 1981 compared with 1978. The percent who applied for and obtained teaching jobs for the 2 years, however, was not significantly different.

	1978	1981
Percent of bachelor's recipients newly qualified to teach, who applied to teach	77	85
Of those who applied to teach, the *percent* who were teaching	77	75

For additional information on how these aggregates break down by field of teacher preparation, see table 2. Estimates for the rate of application and for the percent of applicants that obtained teaching jobs show no significant differences among the listed fields of teacher preparation.

Bachelor's Recipients Newly Qualified to Teach and All Other Bachelor's Recipients: How They Fared in the Labor Market

According to five measures of employment status, the 1979-80 bachelor's recipients newly qualified to teach fared better in the labor market in May 1981 than all other 1979-80 bachelor's graduates as a group. Proportionally, the former participated more in the labor force, were more frequently employed full time, more frequently held jobs in fields closely related to their majors, had a lower unemployment rate, and less frequently worked in nonprofessional, nonmanagerial, nontechnical jobs.

An estimated 13 percent (9 to 17) of 1979-80 bachelor's recipients newly qualified to teach held jobs categorized as nonprofessional, nonmanagerial, and nontechnical (according to the 1970 U.S. Census Occupation Classification System) and reported that a college degree was *not* required in order to obtain their job. A larger proportion of all other 1979-80 bachelor's recipients, 19 percent (17 to 21), fell in this category (table 3A). Conversely, this means that a larger proportion of bachelor's recipients newly qualified to teach held professional, managerial or technical jobs when compared with other graduates; 77 percent compared to 56 percent (tables 4A, 4B). Of this 77 percent, two-thirds were teaching or in other professional education jobs.

The employment status profile for bachelor's recipients newly qualified to teach was similar to that of other bachelor's in professional fields with two exceptions. The estimate for the proportion holding a job closely related to their major field was higher for those newly qualified to teach. And the estimate for the percent of bachelor's with part-time jobs was higher for those newly qualified

	Bachelor's recipients newly qualified to teach	Other bachelor's recipients	
		In professional fields	In arts and sciences fields
Percent of bachelor's in labor force (labor force participation rate)[1]	94	91	76
Percent of bachelor's with full-time job	76	81	55
Percent of bachelor's with part-time job	15	8	17
Percent of full-time employed bachelor's with job closely related to major field	71	62	28
Percent of bachelor's in labor force that are unemployed (unemployment rate)[2]	2.8	3.6	6.8
Percent of full-time employed in non-professional job[3]	13	12	27

[1]Graduates in the labor force are those who were employed or had engaged in job-seeking activities within the past 4 weeks and were available for work during the survey week.

[2]Unemployed graduates are those who during the survey week had no employment, had engaged in job seeking activities within the past 4 weeks and were available for work.

[3]Jobs were classified as nonprofessional, nontechnical, nonmanagerial according to the 1970 U.S. Census Occupational Classification System. Further, the graduate reported that a college degree was not required to obtain this job.

to teach. With one exception, bachelor's recipients newly qualified to teach performed better on these measures of employment status than did other bachelor's recipients in the arts and sciences. The percent of bachelor's with part-time jobs was similar for those newly qualified to teach and for those in the arts and sciences.

The employment status of bachelor's recipients newly qualified to teach and all other bachelor's recipients has not changed much from 1978 to 1981. The only exception to this is a decrease for all other bachelor's recipients in percentage employed full-time who are holding a nonprofessional job; 19 percent in 1981 compared to 25 percent in 1978 (see tables 3A, 3B). This improvement is also reflected in the increase from 1978 to 1981 in percent of professional, managerial or technical jobs held; 50 percent in 1978 to 56 percent in 1981 (see table 4B).

Appendix

Description of the Surveys

The sample surveys of Recent College Graduates conducted in February 1978 and May 1981 were the source of the data for this report. Both surveys used a two-stage sample procedure; the first stage was a sample of institutions offering bachelor's and master's degrees and the second stage was a sample of graduates from the sampled institutions. The institutions were stratified by percent of education graduates, control and geographic region (the 1978 survey also had a separate stratum for predominantly black institutions). The institutions were selected with probabilities proportional to their measure of size, which was a measure constructed using the number of graduates and the percent of education graduates.

The graduates within the sampled institutions were stratified by level of degree, whether or not they were education graduates, and by whether or not they were special or vocational education graduates. Different probabilities of selection were assigned to each stratum to obtain the desired sample size of each type of graduate. A questionnaire was mailed to each sampled graduate.

The results of both stages of sampling are shown in table A-1. The overall response rate was 83.5 percent in 1978 and 72.3 percent in 1981. The difference between the rates is primarily due to the response rates obtained on the subsamples of nonrespondents, and the number of out-of-scope respondents. The intensive field follow-up of nonrespondents conducted for the 1978 survey was not duplicated in the 1981 survey because of budget and time considerations.

A ratio estimation procedure was used to inflate the sample results to the estimates for each year. The estimates differ from the Higher Education General Institutional Survey (HEGIS) numbers which were the basis for the ratios because graduates listed with foreign addresses and deceased graduates were removed and self-reported major was used rather than the institution-reported major. The 1978 survey figures are revised from estimates published in *New Teachers in the Job Market*, August 1980, to reflect the removal of graduates from institutions in outlying areas, graduates with foreign addresses, and deceased graduates.

Table A-1.- Response Rates for the 1978 and 1981 Surveys

Item	1978 Survey	1981 Survey
Sampled institutions	300	301
Out-of-scope institutions	3	4
Responding institutions	283	286
Institutional response rate (percent)	95.3	96.3
Total sampled graduates	12,477	15,852
Out-of-scope graduates	1,528	716
Responding graduates[1]	9,592 (7,922)	11,365 (9,312)
Graduate response rate (percent)	87.6	75.1
Overall response rate (percent)	83.5	72.3

[1]The number of responding graduates used includes weighted respondents from subsamples of nonrespondents in the survey. The actual number of completed questionnaires is given in parentheses.

Reliability of Estimates

Since the estimates in this report are based on sample data, they would differ from figures obtained from a complete census using the same methods. The realized sample for each year is just one of many that could have been selected using the same design. The standard error of the estimate is a measure of the difference between the sample estimates and their average value over all possible samples. Estimating the standard error of the estimates permits us to construct intervals which have a prescribed probability of covering the average of all possible samples. For example, an interval from two standard errors below the estimate to two standard errors above the estimate would include the average of all possible samples approximately 95 percent of the time. Of course the average may or may not be contained in any constructed interval.

Tables A-2 and A-3 contain generalized estimates of the coefficients of variation (CV) for the two surveys for percent of graduates by major categories. (Note, the CV is merely the standard error of the estimate divided by the estimate.) To calculate the CVs for this report, follow these steps:

1) Select the appropriate table for each survey (A-2 for 1978, A-3 for 1981).
2) Find the table column which comes closest to the category of graduate for which you want a CV. For example, for the estimate of 16,500 newly qualified to teach in 1981 who were prepared to teach special education (table 2) use table A-3 under the heading bachelor's graduates, special and vocational education. For the total estimate of 132,200 bachelor's newly qualified to teach (tables 1, 2, 3A, 4A) use table A-3, bachelor's graduates, total, since this group of graduates has representatives in each category.
3) Using the group total N from the appropriate column, calculate percentage of graduates in class, i.e., estimate/N.
4) Using this percent, locate the CV in the table under the closest row entry for percentage of graduates in class and the proper group heading. If the percent calculated in step 3 does not exactly match the row entry percentage, approximate what the CV should be from the next higher and next lower percents.

The estimated CVs for newly qualified to teach graduate estimates derived using the total column from tables A-2 or A-3 are conservative, i.e., they overestimate the CV. This is because 80 percent of the newly qualified to teach are education majors which is an oversampled group. Note, that for an estimate of 50,000 total graduates, the estimated CV is about 8 percent; while for an estimate of 50,000 education graduates, the CV is only about 4 percent.

Confidence intervals for estimates appearing in this report can be constructed using these CVs as described in the following three examples:

a) *Estimates of Totals* — The estimate of the total number of bachelor's recipients in the 1981 survey who were newly qualified to teach is 132,200, or 14.6 percent of the 905,700 bachelor's recipients. Table A-3 shows that the CV for 14.6 percent for total bachelor's recipients is about 0.048. (Note that this is probably conservative since newly qualified to teach are largely education majors.) Thus, the standard error for this estimate is 6,346 (.048 × 132,200 = 6,346), and a 95 percent confidence interval is 132,200 ± 12,692.

b) *Estimates of Proportions* — As an example of estimating a confidence interval for a proportion, consider the proportion of newly qualified to teach bachelor's recipients in 1981 who applied to teach (112,400/132,000 = 85 percent). In this case we must: 1) determine the CV for both the numerator and the denominator of the proportion and 2) apply the formula

$$CV(P) = \sqrt{[(CV)^2(X)] - [(CV)^2(Y)]}$$

where P = X/Y. We know from the example above, the CV(Y) = .048, where Y is the number of newly qualified to teach. Similarly, the CV(X) = .053 where X is the number of newly qualified to teach bachelor's recipients who applied to teach. Therefore, the CV(P) = 0.22 since the square root of $[(.053)^2 - (.048)^2]$ is .022. A 95 percent confidence interval is 85 percent ±3.74 percent since the standard error of the proportion is .022 × 85 percent = 1.87 percent.

This procedure should be applied when the numerator and the denominator of the proportion may be highly correlated but the denominator and the proportion are uncorrelated.

c) *Estimates in Difference Between 1978 and 1981 Survey Estimates*—Since the survey estimates for the two years are uncorrelated, the procedure used to estimate the CV for the difference between the estimates is: 1) find the appropriate CV for the estimate for each year and, 2) apply the formula

$$CV(D) = \frac{\sqrt{[(X)^2(CV)^2(X)] + [(Y)^2(CV)^2(Y)]}}{D}$$

where $D = X - Y$. For example, the estimate of the difference in the number of newly qualified to teach graduates who applied to teach between the 1981 and 1978 surveys is 20,100 (132,500 - 112,400). The CV for this estimate is .406 since the square root of $[(132,500)^2(.042)^2 + (112,400)^2(.053)^2] = 8,152$ and $8,152/20,100 = .406$ (.042 is the CV for the 132,500 newly qualified to teach graduates who applied to teach in 1978). A 95 percent confidence interval is 20,100 ± (16,482) where the standard error of the estimate is .406 × 20,100 = 8,241.

Table A-2.—Coefficients of variation for the 1978 survey

Percentage of graduates in class	Bachelor's graduates				Master's graduates			
	Total N=897,800	Special and vocational education N=31,900	All education N=133,500	Non-education N=764,800	Total N=300,100	Special and vocational education N=18,100	All education N=115,200	Non-education N=184,900
5	.076	.229	.154	.087	.127	.374	.199	.147
10	.053	.158	.106	.060	.087	.257	.137	.101
15	.042	.125	.084	.047	.069	.204	.109	.080
20	.035	.105	.071	.040	.058	.172	.092	.067
25	.030	.091	.061	.034	.050	.149	.079	.058
30	.027	.080	.054	.030	.044	.131	.070	.052
40	.021	.064	.043	.024	.036	.105	.056	.041
50	.018	.053	.035	.020	.029	.086	.046	.034
60	.014	.043	.029	.016	.024	.070	.037	.028
70	.011	.034	.023	.013	.019	.056	.030	.022
80	.009	.026	.018	.010	.015	.043	.023	.017
90	.006	.018	.012	.007	.010	.029	.015	.011
95	.004	.012	.008	.005	.007	.020	.010	.008

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Table A-3.—Coefficients of variation for the 1981 survey

Percentage of graduates in class	Bachelor's graduates				Master's graduates			
	Total N=905,700	Special and vocational education N=31,900	All education N=117,200	Non-education N=788,500	Total N=282,200	Special and vocational education N=18,900	All education N=101,300	Non-education N=180,900
5	.086	.190	.137	.099	.137	.278	.161	.198
10	.059	.132	.096	.068	.094	.193	.111	.136
15	.047	.106	.077	.054	.075	.155	.089	.109
20	.039	.091	.066	.046	.063	.132	.075	.091
25	.034	.080	.058	.040	.055	.116	.065	.079
30	.030	.072	.052	.035	.048	.104	.058	.070
40	.024	.060	.044	.028	.039	.086	.047	.057
50	.020	.052	.038	.023	.032	.073	.039	.047
60	.016	.045	.034	.019	.026	.064	.033	.039
70	.013	.040	.030	.016	.021	.056	.027	.032
80	.010	.036	.027	.012	.017	.049	.022	.026
90	.007	.032	.024	.009	.012	.043	.018	.019
95	.005	.030	.023	.007	.001	.040	.015	.016
100	.003	.028	.022	.005	.006	.032	.013	.012

Tables

Table 1.--Bachelor's and master's degree recipients who were newly qualified to teach, applied to teach and had teaching jobs (1976-77 graduates and 1979-80 graduates)

Teaching status	1976-77 graduates		1979-80 graduates		Percent change
	Number	Percent	Number	Percent	
Bachelor's and master's degrees					
Newly qualified to teach	183,400	100	139,000	100	-24
Did not apply for teaching job	41,900	23	22,400	16	-47
Applied for teaching job	141,500	77	116,600	84	-18
Teaching[1]	109,300	60	88,000	63	-19
Full-time	90,000	49	72,600	52	-19
Part-time	19,300	11	15,400	11	-20
Not teaching	32,200	17	28,600	21	-11
Taught previously but not teaching at the time of the survey	(2)		12,400	9	
Never taught	(2)		16,200	12	
Bachelor's degrees					
Newly qualified to teach	171,100	100	132,200	100	-23
Did not apply for teaching job	38,600	23	19,800	15	-49
Applied for teaching job	132,500	77	112,400	85	-15
Teaching[1]	102,600	60	84,600	64	-18
Full-time	83,800	49	69,700	53	-17
Part-time	18,800	11	14,900	11	-21
Not teaching	29,900	17	27,800	21	-07
Taught previously but not teaching at the time of the survey	(2)		11,900	9	
Never taught	(2)		15,900	12	
Master's degrees					
Newly qualified to teach	12,300	100	6,800	100	-45
Did not apply for teaching job	3,300	27	2,600	38	-22
Applied for teaching job	9,000	73	4,200	62	-53

[1]Includes persons teaching at a second job.

[2]The distinction between those who never taught and those who taught previously but were not teaching at the time of the survey was not made in 1978.

SOURCE: For 1976-77 data — U.S. Department of Education, National Center for Education Statistics, *New Teachers in the Job Market*, August 1980.

Table 2.- Elementary/secondary school teaching status of bachelor's degree recipients newly qualified to teach (NQT) by field of teacher preparation, 1976-77 and 1979-80

Field of teacher[1] preparation	1976-77			1979-80		
	Total NQT	Applied for teaching job	Teaching in Feb. 1978	Total NQT	Applied for teaching job	Teaching in May 1981
All fields	171,100	132,500	[2]102,600	132,200	112,400	[2]84,600
General elementary	46,100	39,900	32,600	36,400	32,400	25,800
Special education	23,300	19,900	16,800	16,500	14,500	12,300
Social science	12,300	9,200	6,800	7,400	6,100	4,600
Physical education	10,000	8,400	6,300	13,500	11,200	6,700
English	8,000	7,000	4,900	8,600	7,300	4,600
Music & art	12,600	9,200	6,400	11,000	9,100	6,500
More than one field	22,200	13,300	8,800	*	*	*
Other	35,600	24,600	19,000	30,100	23,100	15,400
No certification* or eligibility	-	-	-	8,700	8,700	8,700

- Estimates are not presented here because they are too small to be reliable.

* The 1981 questionnaire asked those with multiple teaching fields to state in which they spent most of their time.

* This group was not eligible for a teaching certificate but were considered qualified to teach by virtue of the fact that they were teaching at an elementary or secondary school.

[1] The breakdown by specialty field is far less reliable than All Fields or General Elementary. See appendix for how to calculate the reliability of an estimate.

[2] Includes teaching as a second job.

NOTE: Data for the following fields are included in the "other" category: biological science, foreign language, health, home economics, reading, physical science, bilingual education, English as a second language, vocational education, business, industrial arts and mathematics.

SOURCE: For 1976-77 data — U.S. Department of Education, National Center for Education Statistics, *New Teachers in the Job Market*, August 1980.

Table 3.—Measures of employment status by bachelor's degree recipients

A. 1979-80 bachelor's degree recipients in May 1981

Major field	Total bachelor's recipients	Labor force participation rate[1]	Percent of bachelor's recipients with full-time job	Unemployment rate[2]	Percent of full-time employed	
					With job closely related to major field	In nonprofessional job[3]
Total bachelor's recipients	905,700	86	71	4.5	54	18
Professions	476,900	91	80	3.5	64	12
Arts/sciences	307,500	77	56	6.3	30	26
Other	121,300	88	74	4.8	58	27
Newly qualified to teach	132,200	94	76	2.8	71	13
All other bachelor's recipients	773,500	85	70	4.9	51	19
Professions	366,200	91	81	3.6	62	12
Engineering	67,000	88	84	4.2	66	4
Business & management	186,300	91	83	2.6	53	17
Health	63,800	94	77	2.7	86	5
Education (not newly qualified to teach)[4]	23,900	89	68	9.4	61	16
Public affairs & services	25,200	90	78	6.0	59	13
Arts/sciences	290,100	76	55	6.8	28	27
Biological sciences	52,100	67	45	6.2	39	19
Physical sciences & mathematics	37,600	76	57	3.1	49	4
Psychology	38,800	79	55	7.6	31	31
Social sciences	89,300	77	61	6.8	16	34
Humanities	72,300	79	55	8.4	24	33
Other	117,200	88	75	4.9	57	27
Communications	20,200	95	71	8.5	44	34
Other	97,000	87	76	4.1	60	25

[1]Graduates in the labor force are those who were employed or had engaged in job-seeking activities within the past 4 weeks and were available for work during the survey week. Labor force participation rate is graduates in labor force ÷ total graduates.

[2]Unemployed graduates are those who, during the survey week had no employment, had engaged in job-seeking activities within the past 4 weeks and were available for work. Unemployment rate is unemployed graduates ÷ graduates in labor force.

[3]Nonprofessional jobs were those which according to the 1970 Bureau of Census Occupational Classification System were considered nonprofessional, nonmanagerial or nontechnical. Furthermore, graduates in this category stated in the survey that a college degree was not required to obtain their job.

[4]These education majors did not meet the criteria for newly qualified to teach (see overview).

Table 3.—Measures of employment status by bachelor's degree recipients—continued

B. 1976-77 bachelor's degree recipients in February 1978

Major field	Total bachelor's recipients	Labor force participation rate[1]	Percent of bachelor's recipients with full-time job	Unemployment rate[2]	Percent of full-time employed	
					With job closely related to major field	In nonprofessional job[3]
Total bachelor's recipients	897,800	85	68	5.1	52	23
Professions	402,700	92	79	3.4	66	13
Arts/sciences	406,500	79	57	6.8	33	35
Other	88,600	87	67	6.1	47	30
Newly qualified to teach	171,100	91	72	4.1	67	15
All other bachelor's recipients	726,800	84	67	5.3	48	25
Professions	282,000	92	81	3.3	64	13
Engineering	51,100	90	81	4.5	68	6
Business & management	153,600	92	83	2.8	54	18
Health	54,900	92	81	2.9	91	1
Education (not newly qualified to teach)[4]	22,400	90	71	5.4	56	24
Arts/sciences	362,600	78	56	6.8	31	37
Biological science	62,100	66	44	9.9	38	28
Physical science & mathematics	30,800	78	56	1.6	35	22
Psychology	52,200	78	55	4.9	29	36
Social science & public affairs	137,300	79	60	6.8	30	42
Humanities	80,200	84	60	8.2	29	39
Other	82,200	87	67	6.5	46	30
Communications	26,800	96	75	8.7	44	28
Other	55,400	83	63	5.4	47	32

[1]Graduates in the labor force are those who were employed or had engaged in job-seeking activities within the past 4 weeks and were available for work during the survey week. Labor force participation rate is graduates in labor force ÷ total graduates.

[2]Unemployed graduates are those who, during the survey week had no employment, had engaged in job-seeking activities within the past 4 weeks and were available for work. Unemployment rate is unemployed graduates ÷ graduates in labor force. (Estimates revised.)

[3]Nonprofessional jobs were those which according to the 1970 Bureau of Census Occupational Classification System were considered nonprofessional, nonmanagerial or nontechnical. Furthermore, graduates in this category stated in the survey that a college degree was not required to obtain their job.

[4]These education majors did not meet the criteria for newly qualified to teach (see overview).

SOURCE: U.S. Department of Education, National Center for Education Statistics, *New Teachers in the Job Market*, August 1980.

Table 4.- Occupation of bachelor's degree recipients newly qualified to teach (NQT) by employment status, 1976-77 and 1979-80

A. Bachelor's degree recipients newly qualified to teach (NQT)

Occupation category	1976-77 Total		1979-80 Total	
	Number	Percent of total	Number	Percent of total
Total	171,100	100	132,200	100
Employed[1]	150,600	88	120,300	91
Professional, managerial and technical	122,800	72	102,000	77
Elementary/secondary teacher[2]	100,700	59	83,800	63
Other professional, managerial or technical	22,100	13	18,200	14
Nonprofessional, nonmanagerial, and nontechnical	27,800	16	18,300	14
Armed forces	—	—	—	—
Not employed	19,700	12	11,400	9

-Estimates are not presented here because they are too small to be reliable.

[1]Does not include those in armed forces.

[2]Teaching primary occupation only.

SOURCE: For 1976-77 data — U.S. Department of Education, National Center for Education Statistics, *New Teachers in the Job Market*, August 1980.

Table 4.—Occupation of all other bachelor's recipients by employment status, 1976-77 and 1979-80

B. All other bachelor's recipients

Occupation category	1976-77 Total		1979-80 Total	
	Number	Percent of total	Number	Percent of total
Total	726,800	100	773,500	100
Employed[1]	575,600	79	623,300	81
Professional, managerial, and technical	364,500	50	431,700	56
Elementary/secondary teachers[2]	14,400	2	10,400	1
Teachers other than elementary/secondary and other education[3]	22,900	3	27,100	4
Business and management	120,300	17	149,700	19
Engineering	36,200	5	51,700	7
Health	61,000	8	61,900	8
Public affairs, service and religious workers	18,500	2	31,100	4
Communications	12,200	2	8,900	1
Computer specialists	12,200	2	21,400	3
Fine arts	13,700	2	18,400	2
Technicians	18,400	2	14,100	2
Other professionals	34,700	5	37,000	5
Nonprofessional, nonmanagerial, and nontechnical	211,100	29	191,600	25
Sales	45,400	6	63,600	8
Clerical	83,300	12	69,600	9
Crafts	22,700	3	10,500	1
Other nonprofessionals	59,700	8	47,900	7
Armed forces	12,300	2	11,700	1
Not employed	138,900	19	138,500	18
Unemployed	32,800	4	31,900	4
Not in labor force	106,100	15	106,600	14

[1]Does not include those in armed forces.

[2]Teaching primary occupation only. These teachers do not meet criteria for newly qualified to teach (see overview).

[3]Includes adult education teachers, college teachers, and teachers not elsewhere classified and vocational and educational counselors, elementary/secondary administrators, and college administrators.

SOURCE: For 1976-77 data — U.S. Department of Education, National Center for Education Statistics, *New Teachers in the Job Market*, August 1980.

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